INTRODUCTION: CAUSE AND MEANING IN THE ANTHROPOLOGY OF RELIGION

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Religion has been for a very long time one of the most important topics in anthropological research. Indeed, it could be said that much of modern anthropology began in the second half of the nineteenth century with famous and seminal analyses on the origins of religion. It was understood at that time that religion constituted the clearest expression of mankind's irrational side. Hence the study of religion was undoubtedly a seductive intellectual challenge for the incipient human sciences. And so it has been ever since. Religion is still haunting us as a last frontier of a kind in the cultural landscape of human experience, an irreducible otherness within sameness that has defiantly resisted recurrent waves of secularisation and rationalisation. But the problems that the anthropological study of religion poses to the researcher are manifold. First of all, it is certainly a matter of explaining why we humans believe in irrational things – in whatever way we happen to define them. But secondly, and probably more importantly, it is also a question of finding out what exactly we want to explain or what we want to understand when we think about religion in, let us put it this way, 'scientific' terms. The purpose of this introductory essay is not to go over all the different theoretical approaches that have taken up the challenge of the anthropology of religion, but merely to concentrate on two prominent perspectives upon the religious that stem from two very different ways of probing into human experience. These could be somewhat loosely defined as the symbolic-hermeneutical and the cognitive or cognitive-evolutionary perspective.

In what follows I wish to discuss several concepts specifically relevant for an assessment of those two perspectives. Even though at first sight not all of them might seem to be directly related to the subject matter of the anthropology of religion, eventually I hope to be able to demonstrate how all of them contribute to delineate a particular image of the religious, an image in which both hermeneutics and cognition reveal their respective virtues and limitations.

The nature of the human mind

A few words concerning the distinctive features of hermeneutics in the anthropology of religion will help me introduce the topic. The hermeneutical or symbolic-hermeneutical approach corresponds quite faithfully to the traditional perspective in social anthropology. Even though by no means do all anthropologists like to define themselves as interpretative anthropologists, the truth of the matter is that the majority of them, as Sperber (1996: 35) has gracefully put it, produced interpretations just as Molière's Monsieur Jourdain produced prose, without being aware of doing so. The hermeneutical approach is concerned with meaning, the most distinctive character of human behaviour, and religion is, if anything, a system of meanings with some peculiar characteristics. Specifically, religious meanings differ from other cultural meanings in that they are said to be *symbolic*, that is, they are somehow implicit, indirect or mediated. Religious statements or behaviours cannot be readily understood because they have a deeper and hidden truth, and the mechanism responsible for the existence of this hidden truth is simultaneously the very languages by which religious propositions are delivered: the languages of ritual and myth. Thus religious symbolic meanings are said to be encoded in ritual and myth and, in consequence, the anthropological study of religion turns out to be the interpretation of ritual and myth, which consists in the revelation of the concealed meanings behind those mysterious languages. This has been what the majority of anthropologists of religion have been doing, and quite successfully, ever since the beginning of the discipline. Notice that nothing is said as to why religious meanings need to be symbolic at all. We merely know that the anthropology of religion consists in the interpretation of symbolic meanings, whatever the reasons that make them be 'symbolic' in the first place. Nor do we know the difference between religious symbols and other kinds of symbols. Some of these questions will be taken up later.

But a virulent and merciless revolution in the human sciences has been taking shape in the last few years, and it is a revolution that seems to be particularly relevant to the field of the anthropology of religion. This is the so-called cognitive revolution. In fact, the cognitive revolution began a good way back, in the late 1950s, when the great American linguist Noam Chomsky published his ground-breaking work *Syntactic Structures* and challenged the dominant behaviourist paradigm of the time (see Chomsky 1957, 1972). And yet the repercussions of this pioneering approach to the analysis of language upon the rest of the human sciences were not immediate. In fact, we had to wait until the late 1980s and early 1990s for the development of a cognitive anthropology of religion properly speaking. But we shall leave that aside for the moment and

we shall concentrate first on what was so innovative about Chomsky's approach to the study of language and why it should be relevant at all to the study of other cultural forms. Two very important principles of Chomskean linguistics need to be mentioned. First, linguistics' objective is not the external aspect of language, linguistic performance, but its internal aspect, linguistic competence. The external aspect accounts for an individual's visible verbal behaviour, that is, all the sentences pronounced by this particular individual at a particular time. The internal aspect refers, by contrast, to the finite set of general rules that enable the speaker to generate the infinite set of meaningful sentences of a particular language. Knowledge of that set of rules, what we normally call 'grammar', determines an individual's linguistic competence. Now there are clear differences between the grammars of different languages; but Chomsky's thesis is that underneath those superficial differences there is a deeper level in which language rules are common to all human languages. This is what he named as 'deep grammar'. And thus we come to the second important principle of Chomsky's linguistic theory; deep grammar is not only universal and unconscious (as much grammar is, both deep and superficial) but it is also innate. This does not mean that we are born with a fully-fledged knowledge of deep grammar rules, it rather means, as Chomsky has somewhat provocatively stated, that we *grow* it instead of learning it.

Chomsky did not reach this apparently counterintuitive conclusion (how can there be anything innate in languages, being as different as they are?) thanks to any empirical research on the uniformities between different unrelated natural languages, nor on the innate neural circuits of the human brain presumably responsible for language acquisition. His argument was in essence a philosophical one – and it had also been developed, on a different level, by the American philosopher W.V.O. Quine (1960) in what was known as the indeterminacy theory, according to which a set of empirical facts can be accounted for by different mutually incompatible theories. Notice that what Chomsky is saying is not that humans have an innate predisposition to learn a language, any language (nobody can deny that since no other animal, not even the smartest chimps, can do it under the same environmental conditions as humans) but that humans have an innate predisposition to learn a *particular kind* of languages, with a particular structure. Given the poverty and fragmentary nature of a child's linguistic environment, Chomsky contended, it is impossible for that child to infer from that environment the complex set of rules that constitute the grammar of the language that she will eventually speak. It is impossible unless that child already has *within* her mind the fundamental principles, at least, on which those rules are to be built. That is the reason why deep grammar can be nothing but innate. In other words, the set of naturally existing languages is only a subset of all logically possible languages in a given

world. Thus there has to be some constraining factor that explains why the grammars of existing human languages do not exhaust all their logical possibilities, and this can only be an internal factor to our brains – if the external world allows for more options than those really existing, that limitation cannot be imputed to the external world.

Important repercussions for the study of human behaviour can be derived from Chomsky's thesis. Chomsky was in fact questioning the old empiricist principle according to which the human mind is like a blank slate, an initially white sheet of paper whose contents can only be gradually written down with the information originating in the individual's experience, cultural or otherwise. Far from it, a newborn's mind is not an empty container but there is something already in it, and this something must necessarily be encoded in that newborn's genes, in the human genome. Hence Chomsky understood that the study of the foundations of language should be a properly biological study.

But what about the rest of human abilities? To what extent would it be legitimate to extrapolate from Chomsky's thesis concerning language to other aspects of human behaviour, e.g. cultural behaviour? In the same way as we have a deep grammar for language, might it not be possible to have a 'deep grammar' for culture, being as it is so closely linked with our capacity to learn a language? What would this deep grammar look like? Stated otherwise, if the set of really existing cultures is only a subset of those logically possible in a given world, what kind of constrains operate upon our capacity to acquire cultural knowledge? Even though Chomsky seems to have slightly changed his position in his latest writings (cf. Hauser, Chomsky and Fitch 2002), he has always been very reluctant to extrapolate from the linguistic faculty to other mental faculties. In his view (traditional view at least) the human capacity for language learning originates in a highly domain-specific mental faculty, it has nothing to do about the way the mind works in general or in other domains. But the truth of the matter is that, once we accept that the human mind is not a blank slate, even if this is only as far as the process of language learning is concerned, it is easy to come to the conclusion that there may be other kinds of innate structures with equally constraining effects upon human behaviour.

Chomsky's insights into the nature of language inaugurated a new view on the human mind, a new view in which the mind is no longer seen as a passive receptacle of the external inputs that will eventually determine human behaviour but as an active instigator of very important characteristics of that behaviour. But the question of how relevant are these insights for the analysis of human behaviour remains a moot point. Certainly, if language is no longer exclusively, or mainly, a cultural product but possesses such a remarkable biological foundation, it might very well be the

case that other human capabilities that so far were understood as cultural constructs happen to be equally dependent on a biological basis. On this assumption, a whole new programme for the analysis of the human seems to unfold before our eyes. From now on, the study of culture should no longer be just a matter of interpreting meanings and symbols, which is what we anthropologists had been doing so far, as there is something else to be done: to look for the innate cognitive structures that make the existence of those meanings and symbols possible. In order to fully explore the nature of those cognitive structures, there are still a few other themes that need to be carefully examined. We shall now take a look at the concept of evolution.

Evolution in humans and non-humans

If the human mind is no longer a blank slate but it has an innate structure, a structure that somehow determines, or heavily constrains, different aspects of human behaviour, the human mind does not seem to differ in any significant way from the 'minds' or nervous systems of non-human animals. These do not have any language faculty, needless to say, but insofar as we consider that this exclusively human faculty is underdetermined by cultural inputs, it turns out that its deep nature happens to be the same as that of any other biological determinant of animal behaviour. The parallelisms between human and non-human animal behaviour were the subject matter of the ill-fated discipline of sociobiology in the 1970s. The problem is that such parallelisms could be, and were, grossly misleading if the specificities of human evolution were not duly taken into account, notably the development of the human brain. There is no other significant difference between human and non-human animals than the size and internal complexity of this extraordinary and enigmatic organ. But again, no matter how big and unique the human brain happens to be, it is a biological entity the origins of which, in principle, ought to be accounted for in the same way as any other biological entity, as resulting from an evolutionary process.

It should be noted that Chomsky himself, for all his biologically-minded approach, has repeatedly denied the relevance of evolution – and its attendant processes of adaptation and natural selection – in the explanation of the origins of the language faculty – and his position is not entirely irrelevant to what I shall be arguing later on about religion. Let us concentrate now on the concept of evolution and its relationship with the formation of the human mind-brain. (At this stage, we might as well use the hyphenated term 'mind-brain' to refer to what we have being naming as simply the 'human mind' because it is precisely the intriguing dual nature of this exceptional organ that should concern us now.) Evolutionary psychology is the science

that deals precisely with the evolutionary nature of the cognitive structures that make up the human mind-brain. The assumption of evolutionary psychology is that much of human behaviour can be accounted for in similar terms to those used by evolutionary biologists in the analysis of animal behaviour; that is, animals are moved by 'instincts' and instincts are genetically inherited behavioural patterns that, in turn, result from the need to maximise an individual's inclusive fitness – i.e. individuals' capacity to replicate their genes (see below) – in a given environment. But there is a crucial difference between human and non-human animals at this point and it has to do precisely with the concept of environment. Non-human animal species live in the same or very similar environment for much of their existence, since any significant change in that environment may bring that species either to extinction or mutation. But the case of humans is remarkably different. Not only are humans capable of living in the most variegated environments at present, but during much of its evolutionary history the human species has lived under environmental conditions rather different from those under which the majority of human groups live now. This is because humans use culture instead of genetic mutation to adapt to environmental changes, and cultures are infinitely more malleable than genes.

A very important consequence results from that singularity of the human species. Our genetically inherited behavioural patterns are not adaptive to our current environmental conditions (how could they be, when those conditions are as diverse as they are?). They are adaptive to what is technically defined as our 'environment of evolutionary adpatedness', that is, the environment in which humans have been living for much of their evolutionary history, which happens to be that of scattered hunter-gathering bands in the Pleistocene (roughly, between 10,000 and two million years before present). Hence the explanation for whatever we happen to define as precultural or instinctual as regards human behaviour is to be found not in our current adaptive requirements but in those responsive to that environment of evolutionary adpatedness. So there we have the origins of the cognitive structures of our brains, both those responsible for the language faculty and for any other human ability or capacity with an innate basis. We all have the brains of a Pleistocene hunter-gatherer.

Once we know where our cognitive architecture comes from, the next question we should address is where this knowledge may take us. Evolutionary psychologists have managed to successfully devise cognitive-evolutionary explanations for an astounding variety of human conducts that until now were seen as mere cultural constructs (see Tooby and Cosmides 1992). Is this going to be the fate of religion as well? In what sense may that knowledge help us in our attempt to explain the origins of religion? For instance, do we have a cognitive susceptibility to believe in God in the same way

as we have a susceptibility to learn a language (with some particular characteristics, as we have already seen)? In other words, is there such a thing as a 'religious instinct' commensurable with our language instinct? Some adventurous speculations notwithstanding, I think the answer to this question is clearly a negative one. To postulate the existence of a religious instinct would turn atheists or simply irreligious people into mutants. I do not think there is any need to elaborate on this preposterous thesis to demonstrate its futility. But this does not necessarily exclude the possibility of cognitive-evolutionary explanations of religious phenomena. It only means that these explanations need to be somewhat more subtle and, specifically, that they need to be more overtly associated with a concept that so far has only appeared intermittently and a bit in the background, the concept of culture.

Actually, we seem to have been talking about two different kinds of adaptation, and hence evolution, as far as the human species is concerned. On the one hand, we have ordinary biological evolution that humans share with all the other species of living organisms. On the other, we have whatever happens when culture comes into the picture. We can still talk about 'cultural' adaptation or 'cultural' evolution, but it should be clear that those words have an entirely different meaning from their original biological meaning. What, if anything, do we mean by 'cultural evolution' and how can we relate this form of evolution with biological evolution? In actual fact, I shall be arguing that there is no such a thing as cultural evolution, and that the study of the relationships between biology and culture in the constitution of the human mind should start with this premise. Cultures do not have evolution, they only have history, I firmly sustain; but, needless to say, this is very far from being unanimously accepted in contemporary anthropology. In the field of religious studies there are (at least) two prominent scholars who have put forward two different evolutionary theories of religion: the late Roy A. Rappaport (1999) and David S. Wilson (2002). So before exposing my own thesis let me try to explain why I think these two proposals are invalid.

In a way, what both Rappaport and Wilson have suggested is that cultural evolution merely pursues the job of biological evolution but by other means. And it is precisely in this fulfilment of the aims of biological evolution by other, i.e. cultural, means that religion seems to play a fundamental role. For Rappaport, religion provides human communities with a set of unquestionable sacred postulates that permit a certain degree of social stability given the absence of genetically determined patterns of behaviour. For Wilson, religious beliefs sanctify and make compulsory the counterintuitive altruistic behaviour that human communities need of their members in order to guarantee their survival. Both of them comply with the old functionalist dogma according to which religion, as any other human institution, exists because it

is useful – in whatever way we wish to define this usefulness – and not because it is true or rational. There is certainly a grain of truth in this time-honoured approach, but that is clearly, it seems to me, an insufficient truth. It cannot be argued that people believe in irrational things, or in apparently irrational things (such as the existence of supernatural beings) merely because that belief turns out to be socially useful. As Wilson himself admits (see his discussion of factual realism and practical realism in pp. 227-230), for a belief to be useful in any way, that belief needs to exist in the first place, so its existence cannot be explained as a consequence of its usefulness without falling into a circular argument – incidentally, a typical characteristic of functionalist explanations. Circularity itself is not that bad as regards more or less ordinary beliefs. Even in the light of contrary evidence, people may stick to ambivalent or even clearly false beliefs as long as they get some kind of benefit out of it. But the problem with religious beliefs is that they are not simply 'false' beliefs – if they are at all, since most of them tend to be, precisely, unfalsifiable. Religious beliefs are extraordinary beliefs, beliefs in the existence of clearly counterintuitive or irrational entities such as gods, demons, angels, ghosts, etc. No matter how useful they happen to be for social cohesion or human adaptiveness, due to the fact that they are so clearly at odds with humans ordinary experience of reality, their prior existence needs to be accounted for and functionalism does not seem to be capable of providing that account.

It is true, on the other hand, that Rappaport takes one step further when he remarks on the characteristics of ritual communication as the privileged means to deliver religious messages. This is, in my view, the most valuable aspect of his argument and I shall return to it below. But regardless of the singularities of ritual communication (I insist, an absolutely critical issue), it is his overall cultural-evolutionist programme that I wish to call into question. My point is that neither Rappaport nor, especially, Wilson seem to be aware of the radical discontinuity that exists between the biological and the cultural, particularly in what concerns the possible uses of the concepts of evolution and adaptation.

Let us have a quick look at the concepts of evolution and adaptation as used in evolutionary biology and we will see more clearly the sort of problems we have to face when we try to apply them to the human species. Evolutionary biologists argue that an adaptive trait (be this an organism's morphological characteristic, a particular behaviour, etc.) is that which contributes to or enhances that organism's inclusive fitness, by which they mean the capacity of that organism to reproduce itself and, specifically, to replicate and spread its genes. And among the genes to be replicated are those that code for that adaptive trait. So an adaptive trait is that which enables the reproduction of an organism and, by enabling the reproduction of that organism, enables at the same time its own reproduction.

Now in what sense can this concept, or a parallel one, be used for the study of human behaviour? Can we talk about adaptation in relation to human behaviour in the same way as we talk about adaptation in relation to animal behaviour? Suppose we consider as adaptive practice that which enables the reproduction of the human being who makes that practice. Unlike what happens with adaptation of biological organisms, there is no doubt that the reproduction of a human being does not involve the reproduction of those practices that enabled that reproduction. Or at least, it does not involve it in the same way as the reproduction of a living organism entails, by definition, the reproduction of those genes responsible for the biological traits that made that reproduction possible. The simple fact that a man manages to reproduce himself by marrying and having a family under certain cultural conditions or by making use of certain cultural resources (having a job, having land, having a university degree, etc.) does not mean that his children will have to reproduce themselves under the same cultural conditions or making use of the same cultural resources. As Boyd and Richerson (1985) have argued, a person's genetic offspring does not need to coincide with his or her cultural offspring: influential teachers or thinkers, i.e. those successful at replicating their 'memes', might have very few children, or no children at all.

And this is precisely the problem with the concept of adaptation: by reproducing human beings we do not automatically reproduce the cultural practices that made that reproduction possible – and, inversely, by reproducing those cultural practices we do not automatically reproduce the human beings that made them possible. So an adaptive practice turns out to be either whatever contributes to the reproduction of a human being or to the reproduction of itself. In any case, there is no guarantee that the very same practice may contribute to the reproduction of the next generation of human beings, or to one or just a few human beings for that matter. Nothing else seems to be reproduced by this apparently self-perpetuating process – by contrast with genes, which by reproducing themselves they are actually reproducing whole living organisms. Adaptation as applied to humans turns out to be a very limited concept, indeed, practically a tautology. That explains why when we talk about culture we can only have history but we cannot have evolution – as Franz Boas discovered a long time ago. Cultures are not replicated at each generation in the same way as genes are.

And yet (and this is an important qualification), we cannot simply ignore the portentous fact that each new generation does not start its cultural life from scratch (a contradiction in terms). In other words, cultures do not replicate themselves generation after generation but neither do they change arbitrarily from one generation to the next. So 'something' is undoubtedly transmitted between generations, but what? The answer will come in a minute. The conclusion, provisional conclusion, to be drawn

from all this is that in order to reproduce a human being we need a set of cultural practices (subsistence strategies, etc.) that even though they are not reproduced by that very process of reproduction they are not created ex novo either. In other words, the problem with the concept of adaptation as applied to the study of human behaviour is that human beings are a bit more than just biological organisms, they are, simultaneously, cultural beings. And, in evolutionary terms at least, it is unclear how these two dimensions of human beings, the cultural, which does not evolve, and the biological, which does, should be related.[1] (Using a somewhat snobbish language, we could say that the human biological organism is a *fractal* of a human being but not a fraction, a human being is not, say, 40 percent biological and 60 percent cultural.)

Exaptations and spandrels

Fortunately, the concept of adaptation is not all there is in evolutionary theory. We have seen that biological evolution is definitely based on adaptation. Living organisms evolve in so far as they are able to adapt to the characteristics of their environment. But an organism can do a bit more than merely adapt or maladapt to its environment; specifically, it can develop 'exaptations'. This concept was formulated by the eminent American palaeontologist Stephen Jay Gould and Elisabeth S. Vrba (1982), and it was meant to be a sort of conceptual opposite, or theoretical complement, to the widely used concept in evolutionary biology of adaptation. (Not exactly the contrary to adaptation, that's why I define it as a 'conceptual opposite'). According to Gould and Vrba, an exaptation is 'any organ not evolved under natural selection for its current use'. For instance, biologists argue that insect wings and bird feathers appear to have been initially selected for thermal regulation and only later co-opted for flight. Gould and Vrba used this concept to criticise what they called the 'adaptationist programme' in evolutionary biology, according to which everything, all biological traits (organs or whatever) had to be explained as adaptations for something. Not everybody in biology agrees with Gould's position. But setting aside the controversies the concept of exaptation has generated in the field of evolutionary biology, I think it turns out to be a rather useful concept if we apply it to the analysis of the human mind, specifically, to the relationships between the mind and symbolic-cultural systems.

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1 This does not mean that cultures do not 'improve' in any way. My computer is a hundred times better than the one I had only a few years ago. In fact, in so far as culture is accumulated knowledge, each time someone learns a culture the knowledge stock of that culture increases by the bit of individual knowledge that this new recruit is likely to acquire and spread throughout his or her life. The question is to clearly differentiate between this sort of improvement or increase and evolution in Darwinian terms. But this would be the subject of another paper.

My contention is that the cognitive structures of the human mind that constitute the deep cultural grammar for human symbolic systems should be seen as exaptations and not as adaptations. That is to say, I agree with evolutionary psychologists who hold that the human mind is a bit more than just an empty container that can be filled up with whatever cultural forms. So the mind has a structure, or a set of different structures, that have been formed throughout the long evolutionary process that gave rise to our brains. There was adaptation here, no doubt about that. Like any other organ, the human brain with all its structures and neural circuits is the result of natural selection. But unlike what evolutionary psychologists (or some of them, particularly the old sociobiologists) would argue, I don't think that those neural circuits can only be used to serve the purpose they were initially selected for.

A similar concept to exaptation, if with somewhat less prosaic overtones, is that of 'spandrel', which was formulated by Gould himself and the American geneticist Richard Lewontin with a very similar intention. In an article entitled precisely 'The spandrels of San Marco' (1979) they tried to argue that some biological characteristics of an organism are not adaptations but mere by-products of something else. And they used as an illustration the metaphor of the spandrels of Saint Mark's cathedral in Venice. Spandrels are the adjoining spaces between two arches the existence of which is merely a by-product of the way the arches are built, that is, they have not been made on purpose. And yet in San Marco, and many other places, they are painted with scenes from the Bible or whatever. But this is clearly not their function, their function is merely to solve an architectonic problem (how to hold the dome by means of these arches). Otherwise stated, what we have here is two different rationales converging upon a single point. On the one hand, there is the architectural rationale which imposes a certain structure upon the building, specifically the dome and its arches. On the other, we have the rationale stemming from religious and artistic motivations, which makes necessary the inclusion of certain illustrations or paintings at certain points. It is clear that without those empty spaces between arches no paintings would be possible. But it is also clear that the 'meaning' of these paintings does not originate in the architectonic problem solved by those spaces.

According to what we could call the 'spandrel theory of religion', the cognitive structures that make religious representations possible would be like the dome and its arches, and – quite appropriately – the meaning of those representations would lay in the paintings. Let me emphasise that, from this point of view, even though the possible existence of religion appears to be cognitively determined, religion as such does not seem to fulfil any 'architectonic' (i.e. cognitive) function.

Religion and the nature of symbolic thought

The next concept I shall be discussing is that of symbolism or symbolic thought, which is seen by many, as I said at the beginning of this essay, as the main characteristic of religion. Several well-known cognitive anthropologists have espoused the spandrel theory of cultural and, specifically, religious representations (Lawson and McCauley 1990, Boyer 1994, Sperber 1996, Whitehouse 2004, etc.), and hence they have taken upon themselves the job of explaining, with different degrees of ingenuity and success, the cognitive architecture that makes those religious representations possible. But very few hermeneutical or 'conventional' social anthropologists, to my knowledge, have attended to the other side of the coin, that is, have addressed the problems posed by the interpretation of the meanings of those religious representations *given* a particular cognitive structure. And even fewer have tackled the question of how these two different dimensions of the religious, the cognitive and the symbolic, should be related.

It is time now to focus on the question we left unanswered a few paragraphs above. Something beyond genes is transmitted between generations of human beings, but what is it? We call it 'culture' and we tend to think that it is something similar to genes in that people who share the same culture tend to have the same or very similar behaviours and attitudes in the same way as organisms sharing genes behave and 'look' very similar. But these are two very different ways of being similar. What makes a generation's behaviour and attitudes (or an individual's) very similar to that of the previous or the next one without being exactly the same is that those behaviours and attitudes are respectively *meaningful* to each other. Sharing meanings, that is what culture is all about. Note that sharing meanings is not sharing 'ideas' – we may call them 'signifieds' – but the rules for producing those ideas: I can understand somebody else's ideas without sharing them because I share the rules, the cultural grammar (which is a bit more than just knowing the language), which have produced those ideas. Let us see what we can find if we turn to the analysis of religion from this point of view, i.e. as a meaningful form.

What is the meaning of religion, or rather, what makes religion meaningful? We shall start from the Tylorian definition of religion as the belief in the existence of supernatural beings: a widely, though not universally, accepted definition in anthropology. Relativists would counter that this time-honoured definition begs the question of what a supernatural being could possibly be in cross-cultural terms. But I think relativists' quibbles can be dismissed – perhaps with some difficulties. It might not be possible to formulate a universally valid definition of supernatural being, but the truth of the matter seems to be that humans the world over have, on the one hand,

some notion of ordinary reality populated by ordinary beings (things, organisms and artefacts) and, on the other, together with this they are likely to entertain the notion of some kind of extraordinary reality similarly inhabited by extraordinary beings with supernatural properties (gods, demons, ghosts, etc.). The precise definition of those two worlds and their corresponding inhabitants will certainly vary from culture to culture, and we should allow for the existence a grey area in between where beings are likely to be half-way natural and supernatural to different degrees. Yet the contrast between the natural and the supernatural, notwithstanding that ambivalent grey area, should be clear for everybody, or for the majority at least. Now prominent among the inhabitants of the supernatural world are what we could define as 'gods': more or less anthropomorphic beings endowed with all sorts of different extraordinary powers, notably the capacity to decide upon the events that take place on the natural side of the divide. This is, in a nutshell, the essence of religion, i.e. the deeds and fortunes of those supernatural beings, their influence upon the natural world and the ways in which we humans can interact with them.

Cognitive anthropologists have produced interesting analyses of the cognitive structure that presumably supports this kind of belief. Humans develop from a very early age a so-called 'Theory of Mind'. A theory of mind (ToM) consists in an intuitive notion of agency that enables very young children to differentiate between animate and inanimate things by attributing to the first 'desires' or 'intentions'. These are invisible forces lying within an animate being's head or body which can explain why those beings behave the way they do. The ability to distinguish between animate and inanimate beings along these lines is supposed to have had a clear selective advantage for early humans (remember: those living in the environment of evolutionary adaptiveness), hence there is every reason to believe that our ToM is innate. It should be noted that what is innate in our ToM is only the capacity to make the distinction between animate and inanimate beings and attribute intentions to the first, but not the capacity to tell whether a particular being is animate or inanimate. Only experience, and cultural instruction, can do that. Therefore, since desires and intentions are invisible – and, in consequence, empirically unverifiable – different cultures are likely to draw the line between the animate and the inanimate in different ways as long as, and this is an important caveat, those differences do not invalidate the selective advantage that the ToM was meant to provide. If we do not forget this important qualification, it is easy to see that an innate ToM leaves a wide margin for cultural arbitrariness (and individual errors as well) in the definition of which beings are animate and which are not. Anthropologists will rapidly see in this the cognitive basis of animism, a much-discussed elementary form of religious life which consists in treating objects as if they were living things.

Beliefs in supernatural beings are closely related to animism. According to Steward Guthrie (1993, 2001), beliefs in supernatural beings originate in anthropomorphism, which could be seen as a species of animism. Anthropomorphism consists in the systematic application of human-like models to non-human phenomena. Guthrie thinks that anthropomorphism is a cognitive default of sorts. If we hear a noise that we cannot explain, we instinctively tend to think that it has been produced by someone, some human being, rather than thinking, for instance, that it is merely cracking wood – we will think of someone (an agent, whoever that might be) before thinking of something (an object). Why? 'We readily see and hear our environments as alive and humanlike because when they actually are, we benefit from such interpretations, and when they are not, we lose little' (Guthrie 2001: 94). This sounds a bit like a 'better-safe-than-sorry' policy, much in the line of what psychologist Justin Barrett (2000) identified as the 'Hyper-active Agent Detection Device' (HADD), which refers to an evolved tendency to overestimate an agent's responsibility in the production of unexpected events. To interpret the most little noise or change in the environment as having been made by a potentially threatening agent could have saved our ancestors from lurking predators or enemies. (That is probably the reason why animals too get startled at the most little noise and run away.) It is worth emphasising that, if all this argumentation is accepted, it is not the belief in gods as such that appears to be adaptive but its cognitive substrate, that is, the combination of our ToM with the HADD, which clearly function as 'spandrels' where religious representations can be accommodated.

Of course this is an incomplete explanation. It does not tell us why some people believe in gods rather why all humans might be susceptible to believe in gods. Hence we still do not know what turns a susceptible believer into an actual believer. Moreover, anthropomorphism and HADD can account for a susceptibility to expand agency beyond actual human beings, but gods are a bit more than just invisible or imaginary agents. They are also endowed with all sorts of supernatural powers (omnipotence, omnipresence, etc.) that do not seem to be so clearly related to an expanded ToM. It is one thing to believe in the existence of invisible agents and quite another to believe that those agents possess some extraordinary qualities. Pascal Boyer (1996) defines this as the counterintuitive side of anthropomorphic religious beliefs. All religious representations need to have an optimum blend of both intuitive and counterintuitive elements, he contends. A fully counterintuitive belief would be literally unbelievable whereas a fully intuitive one would hardly qualify as a 'religious' belief. Supernatural beings in all religions do precisely strike this balance. By being anthropomorphic they match with our tacit intuitive assumptions concerning the attributions of human

agents: we can think about God as being good, compassionate, vengeful or, similarly, as seeing, loving, knowing, caring, etc., that is, what we normally attribute to ordinary human beings. This is what makes belief in God believable. But God has more qualities than just being an agent, He has extraordinary characteristics, He is almighty, knows everything, is everywhere at the same time, is eternal, etc. This certainly does not make belief in God more believable but it does make it more attractive, in Boyer's words, more 'attention-grabbing'.

Still, I fail to see how something that is attention-grabbing could be *at the same time* believable. According to Boyer's thesis, the believable side of religious representations corresponds to their intuitive contents; but even if we accept that their counterintuitive contents is what makes them cognitively attractive (rather than believable), we still need to explain why people happen to believe in precisely this *counterintuitive* contents. Clearly, something attractive and attention-grabbing does not need to be in itself believable. We all find terror movies attractive and attention-grabbing but we don't really believe in them. So there is something missing here. Some authors have put the stress on the mechanisms by which those counterintuitive religious messages are delivered. For instance, both Rappaport (1999) and Whitehouse (2004), from different points of view, see in ritual the principal instrument to make believable the unbelievable. Rappaport draws on Austin's theory of illocutionary acts (Austin 1975) to elaborate a fully-fledged and highly seductive theory of ritual communication – whose foundations had already been intimated by other researchers (cf. Bloch 1974 and Ahern 1979). Whitehouse puts forwards a theory of what he calls 'modes of religiosity' in which two different forms of ritual, one frequently performed and with low levels of sensory pageantry, the other infrequent but with high levels of sensory pageantry, appear to be capable of delivering, in their corresponding 'doctrinal' and 'imagistic' modes of religiosity, cognitively costly (vastly counterintuitive) religious messages (cf. McCauley and Lawson 2002).

These approaches lead to a significant and highly plausible departure from the more strictly cognitive analysis in that their emphasis is not only on the spandrels, so to speak, but they also start to venture, rather timidly though, on the sort of messages that happen to be painted on them, and they do it in ways that seem to be cognitively and evolutionarily sensitive. Does all this bring us any nearer to a possible answer to the question of why humans believe in gods? It certainly does, but there is still one final point that needs to be addressed, and this will take us straight into the semantic contents of religious messages: the 'problem of meaning' of religious representations.

Meaning is both form and content, signifier and signified. If we agree that religious messages need to be conveyed by special signifiers because of the counterintui-

tive nature of their signifieds, the next thing is to find out why humans happen to actually believe in those uncanny signifieds. Cognition helps us understand why supernatural beings have anthropomorphic characters, i.e. their partly intuitive disposition, the specificities of ritual communication tell us, on the other hand, how the most counterintuitive qualities of those supernatural beings are rendered credible. But, no matter how believable and attention-grabbing gods and supernatural beings in general happen to be, we do not know yet why humans need to believe in them to begin with (if at all) – as stated above, we still do not know what turns a susceptible believer into an actual believer. Clearly, we have to turn to religious signifieds if we want a satisfactory answer. Erstwhile functionalists thought that people need to believe in gods because that belief is (socially, ecologically, whatever) adaptive. I have already stated the reasons why I consider that this time-honoured explanation is not valid (though it might be partially correct). Relativists like to think that all cultural signifieds, or simply cultural meanings, are idiosyncratic, that nothing of general import can be said about them. And this seems to apply to religious cultural meanings in particular. But relativists are wrong. We saw above that the idea of the supernatural and that of supernatural beings have, with all due qualifications, cross-cultural validity. And the same applies to many of the attributes that normally characterise those supernatural beings. This cannot be just a happy coincidence. It means that important aspects of this notion or set of notions are responsive to some very fundamental dilemmas of human existence. We only need to find out what those dilemmas could possibly be.

Anthropomorphism may give us the clue. We already know that thanks to anthropomorphism culturally postulated supernatural beings can be cognitively processed with no major difficulties. But there is more to anthropomorphism than that because by assuming humanlike characteristics supernatural beings become *intentional* beings, that is, beings capable of producing meanings. I am using here what is normally referred to as a 'subjectivist' concept of meaning according to which meaning does not stand for a correspondence between symbols and things, or language and the world (the so-called 'objectivist' notion), but between symbols and an agent's intentions. As Rappaport (1999: 70-74) perceptively observed, religion does not have to do with what he labels as 'low order meaning', mere information about the world (the correspondence between symbols and things I have just mentioned), but with 'meaningfulness', with the what-does-it-all-mean type of question. He did not seem to realise, however, that meaningfulness is not only produced by the sort of language employed to deliver the corresponding messages, metaphor or metonymy as the case may be (i.e. myth or ritual), as he correctly stated, but very specially by the intentional subject who makes use of that language. A computer can provide us with very accurate informa-

tion about the world, low order meanings in Rappaport's terms, but it can also *mean* nothing with it. This is because a computer *cannot be seen as* an intentional subject (cf. Dennett 1971). Now try to think under what conditions or in what circumstances an inanimate object like a computer can be seen as an intentional subject. Well, we can treat a computer as an animate being metaphorically, that is, as *standing for* a real intentional being such as the engineer who devised it, or maybe the person who gave it to us as a special present, etc. (Should anthropologists be reminded of Mauss's 'spirit of the gift'?) Now imagine a situation where certain objects are systematically treated as standing for intentional beings.

Religion, with its anthropomorphic supernatural beings, provides us with a privileged instance of that situation. Max Weber saw it clearly in a very lucid passage of his posthumous work *Economy and Society* that is worth quoting in full:

> The development of a realm of souls, demons, and gods in turn affected the meaning of the magical acts. For these beings cannot be grasped or perceived in any concrete sense but possess a kind of transcendental existence which is normally accessible only through the mediation of symbols and meanings and which consequently appears to be shadowy and sometimes outright unreal. Since it is assumed that behind real things and events there is something else, distinctive and spiritual, *of which real events are only the symptoms or indeed the symbols*, an effort must be made to influence the spiritual power that expresses itself in concrete things. This is done through actions that address themselves to a spirit or soul, hence by instrumentalities that "mean" something, i.e. symbols. Thereafter, naturalism may be swept away by a flood of symbolic actions. (my emphasis, Weber 1992: 404)

Weber is thinking here about the origins of religion as resulting from the demise of magic in terms of a conventional evolutionist sequence widely accepted in his time. But let us leave that aside since it does not affect what to my mind constitutes a really critical point he makes concerning the nature of religious representations. Note that Weber is talking about religious symbolism in two different senses. First, the appearance of religion pushes, as it were, supernatural beings away from this world towards an invisible and transcendental realm, hence it is no longer feasible to interact with them directly but only in a mediated form, by means of the symbols that stand for them (icons, etc.). Secondly, and more importantly, it is not only particular objects which symbolise supernatural beings that, due to their transcendental nature, cannot be grasped in any other way, but also 'real events' that become 'symptoms or indeed symbols' of something 'distinctive and spiritual'. How could that possibly be unless we concede that those real events are not just contingencies but are also a result of the will

of some transcendental being and, as such, they are not just mere events that provide us with information about the world but meanings, which, like any other meaning, originate in a particular agent's intentions? From this religious point of view, reality is not a source of information about the way the world is but a source of meanings produced by divine intentions. The world becomes symbolic of God's (or the gods') mind in the same way as ordinary individuals' actions and utterances are symbolic of the intentions they have in their minds. Weber thought that this symbolic interpretation of the world was only properly achieved within Calvinist doctrine, which he considered to be the most advanced form of religious cult. But we do not need to agree with this evolutionist scheme of the history of religion to fully appreciate the value of Weber's insightful observation.

From this perspective, gods turn out to be anthropomorphic because, like their human counterparts, that is the only way they can bee seen as intentional beings, i.e. meaning-producing subjects. And in the same way as ordinary human beings give meaning to their actions through their intentions, gods can also give meaning to theirs. But gods' actions have given rise to everything, needless to say, to the world we live in and to all the possible worlds that could exist. Hence the world as gods' creation is not a contingent world, it is a meaningful world precisely because it originates in divine intentions. Of course to see the world as non contingent, we need to postulate the existence of supernatural beings, that is, beings with extraordinary qualities whose actions can account for everything there is. But that is the cognitive price worth paying. Religion may be parasitic on human cognitive structures but necessary for human understanding. Similar to language, there is much that is innate in religion. No religion could be possible without certain innate cognitive dispositions. But neither does a biologically founded language seem to be biologically necessary, nor is a cognitively structured religion cognitively determined.

In this paper, I have attempted at a possible reconciliation between cognitive and hermeneutical perspectives upon religion. The missing link between the two approaches has been the concept of exaptation, which refers to those biological structures that can be recruited to perform a different function from the one for which they initially evolved. Cultural forms are just exaptations emerging from our innate cognitive dispositions. This means that cultures are closely associated with evolved structures even though they themselves do not evolve, but they are handed down from generation to generation (or from individual to individual) through symbolic communication. Now our capacity for symbolic communication originates in our ToM, which enables us to account for other people's conduct in terms of their mental states, their intentions. We must assume that humans' ToM is an evolved cognitive structure

responsive to the special conditions that gave rise to the human species, probably due to the need for social cooperation. Hence our ToM's proper domain is the interpretation of other human beings' actions as resulting from their intentions. But, as Sperber rightly pointed out (1996: 134-139), a cognitive structure's proper domain does not need to correspond with its actual domain. If interpreting human beings' actions in terms of their intentions – and maybe other events too that are not actually related to anyone's intentions – turned out to be adaptive in human evolution (so we all have a biologically inherited capacity to proceed in this way), an exaptation of our ToM could be its expansion to encompass the whole world and everything that happens to take place in it, that is, not to see the whole world as having a mind but as resulting from a subject's intentions. Why should humans find this improper expansion attractive when that is not clearly the adaptive purpose that gave rise to their ToM in the first place? Simply because only intentional explanations are meaningful explanations. Remember that humans have an evolved, biologically inherited capacity to engage in symbolic communication, i.e. to produce meanings, but the symbols thus produced do not evolve because symbols themselves are not adaptive, they are merely meaningful. So what do we get from them? We don't see the world as produced by blind and unaccountable forces, but we see intentions, purposes and meaning. And we feel better.

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Abstract

This paper provides a critical assessment of two major theoretical approaches to the anthropology of religion, the cognitive and the hermeneutical or symbolic approaches, with the aim of reaching some kind of accommodation or compatibility between the two. The paper starts by tracing the theoretical origins of the cognitive perspective to the so-called 'cognitive revolution' initiated by Chomskean linguistics and prominent developments of evolutionary biology and psychology that gathered momentum in the decades to follow. The main contributions of cognitive scholars to the anthropological analysis of religion are highlighted alongside their limitations, which in essence have to do with the failure to grasp the symbolic nature of religious representations. In the end the paper suggests a possible way to overcome those limitations and make cognition compatible with hermeneutical analysis by drawing insights from Weber's observations on the nature of religious thought.